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Appl. No. 09/866,261

Amendments to the Claims

The listing of claims will replace all prior versions, and listings of claims in the application.

1. (currently amended) A method of detecting the nucleic acid of naturally occurring avian leucosis/sarcoma viruses in egg albumen, wherein said naturally occurring virus is isolated or detected from chicken or egg host that have acquired infection by the wild-type of said virus in nature, comprising the steps of:

isolating viral RNA from said albumen using β -mercaptoethanol; and
performing RT-PCR, and
direct sequencing to a RT-PCR product.

2. (previously presented) The method of claim 1, wherein said egg albumen is selected from the group consisting of unfertilized chicken egg albumen, fertilized chicken egg albumen, unfertilized egg albumen from an animal of the class *Aves* and fertilized egg albumen from an animal of the class *Aves*.

3. (canceled)

4. (canceled)

5. (canceled)

6. (currently amended) A method of determining the subgroup specificity of nucleic acid of naturally occurring avian leucosis/sarcoma virus, including distinguishing between exogenous and endogenous retroviruses wherein the subgroup includes subgroups A-E, comprising the steps of:

isolating viral RNA from egg albumen using β -mercaptoethanol;
performing RT-PCR; and
sequencing the amplified RT-PCR product, wherein the resulting sequence will determine the subgroup specificity of said virus and distinguish between exogenous and endogenous retrovirus.

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7. (previously presented) The method of claim 6, wherein said egg albumen is selected from the group consisting of unfertilized chicken egg albumen, fertilized chicken egg albumen, unfertilized egg albumen from an animal of the class *Aves* and fertilized egg albumen from an animal of the class *Aves*.

8. (canceled)

9. (canceled)

10. (canceled)

11. (canceled)

12. (canceled)

13. (currently amended) A method of detecting the nucleic acid of naturally occurring avian leucosis/sarcoma viruses in a poultry sample, wherein said naturally occurring virus is isolated or detected from chicken or egg host that have acquired infection by the wild-type of said virus in nature, comprising the steps of:

isolating viral RNA from egg albumen of said poultry sample using β -mercaptoethanol; and

performing RT-PCR using an oligonucleotide having a sequence at least 95% identical to a sequence selected from the group consisting of: (a) SEQ ID No: 7 and SEQ ID No: 8; (b) a nucleotide sequence encoding the gp^{env} 85 protein; and (c) an oligonucleotide which hybridizes under stringent hybridization conditions to a oligonucleotide defined by (a) or (b), and

direct sequencing to the RT-PCR product.

14. (canceled)

15. (currently amended) A method of determining the subgroup specificity of the nucleic acid of naturally occurring avian leucosis/sarcoma virus wherein the subgroup includes subgroups A-E, and distinguishing between exogenous and endogenous retroviruses, comprising the steps of:

obtaining egg albumen from a poultry sample;

isolating viral RNA from said albumen using β -mercaptoethanol;

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performing RT-PCR using an oligonucleotide having a sequence at least 95% identical to a sequence selected from the group consisting of: (a) SEQ ID No: 7 and SEQ ID No: 8; (b) a nucleotide sequence encoding the gp^{env} 85 protein; and (c) an oligonucleotide which hybridizes under stringent hybridization conditions to a oligonucleotide defined by (a) or (b); and

sequencing the amplified RT-PCR product, wherein the resulting sequence will determine the subgroup specificity of the virus and distinguish between exogenous and endogenous retrovirus.

16. (canceled)

17. (previously presented) The method of claim 6, wherein the RT-PCR is performed using an oligonucleotide having a sequence at least 95% identical to a sequence selected from the group consisting of: (a) SEQ ID No: 7 and SEQ ID No: 8; (b) a nucleotide sequence encoding the gp^{env} 85 protein; and (c) an oligonucleotide which hybridizes under stringent hybridization conditions to a oligonucleotide defined by (a) or (b).